

CORRECTED VERSION

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
4 March 2004 (04.03.2004)

PCT

(10) International Publication Number  
**WO 2004/019556 A1**

(51) International Patent Classification<sup>7</sup>: **H04L 12/24**

(21) International Application Number:  
PCT/EP2003/008702

(22) International Filing Date: 6 August 2003 (06.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
TO2002A000742 23 August 2002 (23.08.2002) IT

(71) Applicant (for all designated States except US): TELECOM ITALIA S.P.A. [IT/IT]; Piazza degli Affari, 2, I-20123 Milano (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): AREDDU, Marco [IT/IT]; Telecom Italia S.p.A., Via Reiss Romoli, 274, I-10148 Torino (IT). ARIZIO, Riccardo [IT/IT]; Telecom Italia S.p.A., Via G. Reiss Romoli, 274, I-10248 Torino

(IT). CLARETTO, Claudio [IT/IT]; Telecom Italia S.p.A., Via G. Reiss Romoli, 274, I-10148 Torino (IT). DE MARTINO, Luigi [IT/IT]; Telecom Italia S.p.A., Via G. Reiss Romoli, 274, I-10148 Torino (IT). GENTILE, Gabriele [IT/IT]; Telecom Italia S.p.A., Via G. Reiss Romoli, 274, I-10148 Torino (IT).

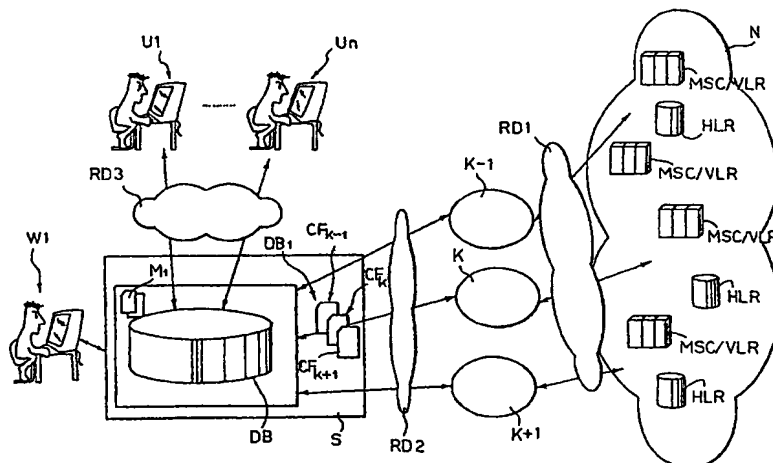
(74) Agents: BATTIPEDE, Francesco et al.; Pirelli S.p.A., Viale Sarca, 222, I-20126 Milano (IT).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,

[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR CONFIGURATION CONTROL IN TELECOMMUNICATIONS NETWORKS



(57) Abstract: The configuration of a telecommunications network (N) is subjected to control by generating a model configuration (M1) which expresses, for at least a function of each element subjected to control, a model for implementing the function itself. For each element subjected to control, at least a respective set of configuration data (. . . , CF<sub>k-1</sub>, CF<sub>k</sub>, CF<sub>k+1</sub>, . . . ) of the element itself is collected, subsequently verifying that the function implemented by simulation, hence in the absence of interaction with the element itself, based on the aforesaid set of configuration data corresponds with the implementation model included in the model configuration (M1). The operations in question are carried out for the nodes as well as for the interfacing elements between the nodes (k, k+1) of the network. For all elements in question it is possible to carry out the functions described also in relation to a plurality of respective sets of configuration data (CF, CM) which express, preferably in exhaustive fashion, respective different configuration states of the element.



SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

— of inventorship (Rule 4.17(iv)) for US only

**Declarations under Rule 4.17:**

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE,

**Published:**

— with international search report

(48) Date of publication of this corrected version:

24 March 2005

(15) Information about Correction:

see PCT Gazette No. 12/2005 of 24 March 2005, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.